

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 35

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

*Ex parte* MUNEHISA FUJITA  
and ATSUSHI MATSUNAGA

MAILED

FEB 21 2002

Appeal No. 1999-2529  
Application 08/915,683

PAT. & T.M. OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

HEARD: January 24, 2002

Before WARREN, OWENS and LIEBERMAN, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

*Decision on Appeal*

This is an appeal under 35 U.S.C. § 134 from the decision of the examiner finally rejecting claims 1 and 5 through 9, which are all of the claims in the application. Claim 1, as it stands of record,<sup>1</sup> is illustrative of the claims on appeal:

1. An internal latent image direct positive photographic silver halide emulsion comprising tabular silver halide grains having an average grain diameter of not less than 0.3  $\mu\text{m}$  and an aspect ratio of from not less than 2 to not more than 100 in an amount of not less than 50% of all silver halide grains as calculated in terms of area; wherein said tabular silver halide grains are core/shell grains having a core and an external shell, the average grain thickness a

<sup>1</sup> Appellants submitted a correct copy of the appealed claims appended to the reply brief in response to the errors in the copy of the claims appended to the brief that were identified by the examiner (answer, pages 3-4).

along the main plane of the external shell thereof is from not less than 0.2  $\mu\text{m}$  to not more than 1.5  $\mu\text{m}$  and the average grain thickness b perpendicular to the main plane of the external shell thereof is from not less than 0.04  $\mu\text{m}$  to not more than 0.30  $\mu\text{m}$ ; and,

wherein the core of said core/shell grains are composed of silver bromide and are subjected to chemical sensitization in the presence of at least one compound selected from the group consisting of compounds represented by the following formula (A), (B) and (C) and a gold sensitizer in combination under the condition that substantially no thiosulfate ion is present during the chemical sensitization:



wherein R, R<sup>1</sup> and R<sup>2</sup> may be the same or different and each represents an aliphatic group, aromatic group or heterocyclic group; M represents a cation; L represents a divalent linking group; m represents 0 or an integer of 1; the compounds of the formula (A), (B) and (C) may be each in the form of a polymer containing, as a repeating unit, a divalent group derived from the structures represented by the formulae (A), (B) and (C), respectively; and R, R<sup>1</sup>, R<sup>2</sup> and L may be optionally connected to each other to form a ring.

The appealed claims, as represented by claim 1, are drawn to an internal latent image direct positive photographic silver halide emulsion comprising tabular, core/shell silver halide grains having the specified physical characteristics and concentration, wherein the core is composed of silver bromide that is chemically sensitized in the presence of at least one thiosulfonate compound selected from the formulae (A) through (C) with a gold sensitizer in combination, such that substantially no thiosulfate ion is present during the sensitization. According to appellants, the claimed internal latent image direct positive photographic silver halide emulsion "exhibits a high sensitivity and is less susceptible to the formation of re-reversed negative image" (specification, pages 5-6).

The references relied on by the examiner are:

Evans et al. (Evans)	4,504,570	Mar. 12, 1985
Tanemura et al. (Tanemura)	5,081,009	Jan. 14, 1992
Shuto et al. (Shuto)	5,110,719	May 5, 1992

The examiner has rejected appealed claims 1 and 5 through 9 under 35 U.S.C. § 103(a) as being unpatentable over Evans in view of either Tanemura or Shuto.

Appellants state in their reply brief (page 1) that they "agree with the examiner that Claims 1 and 5-9 should all stand or fall together." Thus, we decide this appeal based on appealed claim 1. 37 CFR § 1.192(c)(7) (1997).

We affirm.

Rather than reiterate the respective positions advanced by the examiner and appellants, we refer to the examiner's answer and to appellants' brief and reply brief for a complete exposition thereof.

*Opinion*

We have carefully reviewed the record on this appeal and based thereon find ourselves in agreement with the examiner that the claimed internal latent image direct positive photographic silver halide emulsion encompassed by appealed claim 1 would have been obvious over the combined teachings of Evans, Tanemura and Shuto to one of ordinary skill in this art at the time the claimed invention was made.

There is no dispute that Evans discloses internal latent image direct positive photographic silver halide emulsions containing core/shell tabular grains. See Evans, e.g., cols. 7-10. Indeed, appellants acknowledge as much in their specification (page 12, full paragraph, penultimate line). Both the examiner and appellants also agree that the core/shell tabular grains of Evans differ from the tabular core/shell grains of the claimed emulsion encompassed by appealed claim 1 in that the core of the reference grains is not chemically sensitized in the presence of at least one thiosulfonate compound of the formulae (A) through (C) with a gold sensitizer in combination under the condition that substantially no thiosulfate ion is present during the chemical sensitization, as provided by the plain language of the claim. Thus, the dispositive issue with respect to a *prima facie* case of obviousness is whether one of ordinary skill in this art would have found in the combined teachings of Evans, Tanemura and Shuto the reasonable suggestion that such thiosulfonate compounds disclosed by Tanemura and Shuto can be present when a silver bromide core of the core/shell tabular grains of Evans are chemically sensitized in the presence of at least a gold sensitizer, as the silver bromide core is also required by the plain language of the claim. See *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997).

We first consider appellants' argument that core of the reference grains is composed of silver bromoiodide while the grains of the claimed emulsion must be composed of silver bromide (reply brief, pages 2 and 4). We cannot agree with appellants that Evans is so limited because the reference clearly discloses that both silver bromide and silver bromoiodide are useful (e.g., col. 12, 65-67) and discloses methods to prepare the former that "exclude iodide" (col. 16, lines 50-68). We further note that gold sensitizers are taught by Evans to be used at least in combination with other sensitizers including "sulfur," for chemically sensitizing the core regardless of the silver halide of which the core is composed (e.g., col. 11, lines 22-46). While Evans provides an example of a silver bromoiodide core chemically sensitized with sulfur containing sodium thiosulfate pentahydrate and gold containing potassium tetrachloroaurate in Emulsion A thereof (col. 69, lines 20-49), we determine that one of ordinary skill in this art would have recognized from the teachings of Evans that silver bromide and other combinations of other sensitizers and gold sensitizers can be used as well to obtain core/shell grain containing emulsions having the properties taught by the reference (*id.*). *See generally, Merck & Co., Inc. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807, 10 USPQ2d 1843, 1845-46 (Fed. Cir. 1989) ("That the '813 patent discloses a multitude of effective combinations does not render any particular formulation less obvious. This is especially true because the claimed composition is used for the identical purpose."); *In re Lemin*, 332 F.2d 839, 841, 141 USPQ 814, 815-16 (CCPA 1964) ("Generally speaking there is nothing unobvious in choosing 'some' among 'many' indiscriminately.").

Turning now to issue of the absence of the presence of at least one thiosulfonate compound of formulae (A) through (C) of appealed claim 1 during chemical sensitization of the core silver bromide as set forth in appealed claim 1, we find that each of Tanemura (e.g., col. 10, line 25, to col. 11, line 51; col. 4, line 56; col. 5, line 64, to col. 6, line 6; and col. 11, line 66, to col. 12, line 2) and Shuto (e.g., col. 2, line 53, to col. 7, line 20; col. 10, lines 43 and 52-55; and col. 7, lines 44-46) clearly would have taught one of ordinary skill in this art that the core of the core/shell tabular grains of Evans can be chemically sensitized in the presence of at least one thiosulfonate compound which falls into formulae (A) through (C) of appealed claim 1. In this respect, both of Tanemura (e.g., col. 4, lines 67-68, and Example 1) and Shuto (e.g., col. 10, lines

67-68, and Example 1) also teach that preferably no silver iodide is present in the core and exemplify grains with silver bromide cores, and Evans does teach that silver iodide is used in the preparation of silver bromoiodide in Emulsion A (col. 69, lines 21-40) and that silver bromide can be prepared by processes that “exclude iodide” as we discussed above.

Furthermore, both of Tanemura (e.g., col. 3, lines 54-63; col. 6, lines 2-6; col. 11, line 66, to col. 12, line 2; and Example 1) and Shuto (e.g., col. 7, lines 44-46; col. col. 11, lines 17-23; and Example 1) teach the use of the same chemical sensitizers for the core as those disclosed in Evans, including gold sensitizers alone or in combination with other sensitizers, and exemplify sodium thiosulfate and chloroauric acid (tetrahydrate). Tanemura discloses that using at least one thiosulfonate compound of formulae (II) through (IV) thereof results in emulsions which provide a high contrast direct positive image having a low minimum image density ( $D_{min}$ ) and a high maximum image density ( $D_{max}$ ) (e.g., col. 2, line 63, to col. 3, line 5) while Shuto discloses that using at least one thiosulfonate compound of formulae (I) through (III) thereof results in emulsions which provide a high contrast direct positive image in which the  $D_{min}$  is reduced without reducing the  $D_{max}$ . While Shuto discloses that at least one compound of the formula (IV) must also be used, such a compound would be included in the claimed emulsions of appealed claim 1 because of the transitional term “comprising.” *See In re Baxter*, 656 F.2d 679, 686-87, 210 USPQ 795, 802-03 (CCPA 1981) (“As long as one of the monomers in the reaction is propylene, any other monomer may be present, because the term ‘comprises’ permits the *inclusion* of other steps, elements, or materials.”).

Thus, Tanemura and Shuto, separately and together would have taught one of ordinary skill in this art that cores of core/shell tabular grains, including those of Evans, which are preferably composed of silver bromide, can be chemically sensitized by using gold sensitizers alone or in combination with other sensitizers as also disclosed by Evans, in the presence of thiosulfonate compounds in order to obtain certain image density properties.

Based on this evidence, we find that one of ordinary skill in this art would have found in the combined teachings of Evans, Tanemura and Shuto the reasonable suggestion to chemically sensitize the core silver halide, particularly silver bromide, of core/shell tabular grains of Evans with a gold sensitizer in combination with the presence of the thiosulfonate compounds of

Tanemura and Shuto, and also with other sensitizers, in order to obtain core/shell tabular grains for use in the internal latent image direct positive photographic silver halide emulsions of Evans in the reasonable expectation of obtaining the advantages high-contrast positive images with the minimum and maximum image densities taught by Tanemura and Shuto. Accordingly, *prima facie*, one of ordinary skill in this art routinely following the combined teachings of Evans, Tanemura and Shuto would have arrived at the claimed internal latent image direct positive photographic silver halide emulsion encompassed by appealed claim 1. *See In re Vaeck*, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991), citing *In re Dow Chemical Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988) (“Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant’s disclosure.”); *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981) (“The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.”).

Accordingly, since a *prima facie* case of obviousness has been established over the combined teachings of Evans, Tanemura and Shuto, we have again evaluated all of the evidence of obviousness and nonobviousness based on the record as a whole, giving due consideration to the weight of appellants’ arguments and the evidence in the declaration of appellant Matsunaga filed March 4, 1998 (Paper No. 19).<sup>2</sup> *See generally, In re Johnson*, 747 F.2d 1456, 1460, 223 USPQ 1260, 1263 (Fed. Cir. 1984); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); *In re Rinehart*, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

We have carefully considered all of appellants’ arguments in the brief and reply brief. Even though the thiosulfonate compounds of formulae (A) through (C) of appealed claim 1 are

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<sup>2</sup> We have limited consideration of the evidence of record to that argued in appellants’ brief (page 11) and reply brief (pages 4-5) which involves only the evidence presented in the declaration filed March 4, 1998 (Paper No. 19). Cf. *In re Baxter Travenol Labs.*, 952 F.2d 388, 392, 21 USPQ2d 1281, 1285 (Fed. Cir. 1991) (“It is not the function of this court to examine the claims in greater detail than argued by appellant, looking for nonobvious distinctions over the prior art.”).

not identified as chemical sensitizers in Tanemura and Shuto, and it is not clear from appellants' specification if they are sensitizers,<sup>3</sup> and thus may not be said to be interchangeable with thiosulfates in the sensitization of the core of core/shell grains on that basis (e.g., brief, pages 9-11, and reply brief, page 2), such a determination is not dispositive with respect to the issue of *prima facie* obviousness because each of Tanemura and Shuto specifically teach that the thiosulfonates disclosed therein should be present when the core of the core/shell tabular grains of Evans are chemically sensitized with chemical sensitizers, including thiosulfates in order to obtain certain properties as we pointed out above.

Furthermore, while the silver bromide core of the claimed internal latent image direct positive photographic silver halide emulsions encompassed by appealed claim 1 is chemically sensitized with "substantially no thiosulfate ion," which plainly does not entirely exclude the presence of such ions as appellants contend (e.g., brief, pages 9-10, and reply brief, page 3) but would exclude the amount of ions present in the Examples of the applied references, each of Evans, Tanemura and Shuto would have taught that other core sensitizers than thiosulfates can be employed with gold in sensitizing the core of the core/shell tabular grains of Evans. Similarly, the specific teaching in Tanemura and Shuto to have the thiosulfonates thereof present when sensitizing the core of the core/shell tabular grains of Evans is sufficient direction to one of ordinary skill in the art to do so even if these references exemplify other core/shell grains (reply brief, page 4 and n. 1). *See generally, Merck v. Biocraft*, 874 F.2d at 807, 10 USPQ2d at 1846, quoting *In re Lamberti*, 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976) ("But in a section 103 inquiry, 'the fact that a specific [embodiment] is taught to be preferred is not controlling, since all disclosures of the prior art, including unpreferred embodiments, must be considered.'").

Moreover, appellants' argument that the property of negative sensitivity, that is, the

<sup>3</sup> There is no dispute that the thiosulfates are exemplified by each of the applied references as sulfur containing sensitizers for the core of core/shell grains. However, there is no disclosure in either Tanemura or Shuto that thiosulfonates are sensitizers and the disclosure at page 39, lines 14-17, is unclear since the preferred "thiosulfate" is not "[s]uch a thiosulfonate . . . [as in] formula (A), (B) or (C)" as pointed out at hearing. In any event, all that is disclosed and claimed by appellants is the "presence" of the thiosulfonate compounds when the core is chemically sensitized.

formation of a negative image or “less susceptible to the formation of re-reversed negative images” (specification, pages 5-6), of the claimed internal latent image direct positive photographic silver halide emulsions is not disclosed by the applied references (brief, pages 8-12, and reply brief, page 4) alone is not persuasive to establish nonobviousness since there is clear direction in Tanemura and Shuto to have the thiosulfonates thereof present during the chemical sensitization of the core to obtain the advantages taught therein, including a high-contrast positive image. *See In re Kronig*, 539 F.2d 1300, 1304, 190 USPQ 425, 428, (CCPA 1976) (The reference provides “ample motivation to add water to increase product yields, and we do not view the rejection as deficient merely because appellants allege a different advantage resulting from the addition of water. Obviousness under 35 USC 103 does not require absolute predictability, . . . and it is sufficient here that [the reference] clearly [suggests] doing what appellants have done. [Citations omitted.]”); *see also In re Kemps*, 97 F.3d 1427, 1429-30, 40 USPQ2d 1309, 1311 (Fed. Cir, 1996); *In re Beattie*, 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992); *In re Dillon*, 919 F.2d 688, 693, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990) (*in banc*). It is also well settled that the mere discovery of a new property of a composition or process will not, without more, be dispositive of the nonobviousness of the claimed invention over the reference. *See, e.g., In re Woodruff*, 919 F.2d 1575, 1577, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990); *cf. In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990); *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 782-83, 227 USPQ 773, 779 (Fed. Cir. 1985).

Thus, we now turn to appellants’ arguments that the evidence in the declaration filed March 4, 1998 (Paper No. 19) establishes that the claimed silver bromide core containing internal latent image direct positive photographic silver halide emulsions encompassed by appealed claim 1 unexpectedly possess the properties that are and are not suggested by the applied prior art (brief, page 11, and reply brief, pages 3 and 4-5). We point out that it is well settled that the burden of establishing the practical significance of data in the record with respect to unexpected results rests with appellants, which burden is not carried by mere arguments of counsel. *See generally, In re Geisler*, 116 F.3d 1465, 1470, 43 USPQ2d 1362, 1365-66 (Fed. Cir. 1997); *In re Merck & Co.*, 800 F.2d 1091, 1099, 231 USPQ 375, 381 (Fed. Cir. 1986); *In re Longi*, 759 F.2d 887, 897, 225 USPQ 645, 651-52 (Fed. Cir. 1985); *In re Klosak*, 455 F.2d 1077, 1080,

173 USPQ 14, 16 (CCPA 1972); *In re D'Ancicco*, 439 F.2d 1244, 1248, 169 USPQ 303, 306 (CCPA 1971). Here, upon carefully considering the record as a whole in light of the arguments advanced by appellants, we find that appellants have not carried their burden.

Appellants particularly point to Samples 208-210 in the declaration and present a table in the reply brief (page 5) which provides certain information from Tables 1, 2 and 3 of the declaration. We find that these compared Samples differ in the sensitization of a silver bromide core with a gold sensitizer in claimed Samples 208 (emulsion "J2" with 63.8 mg/Ag mol of thiosulfonate "1-16") and 209 (emulsion "J3" with 4.4 mg/Ag mol of thiosulfonate "1-16") and of a silver bromoiodide core with a gold sensitizer in prior art Sample 210 (emulsion "J4" with 4.4 mg/Ag mol of thiosulfonate "1-16"), as no thiosulfate compound was used in sensitization, with claimed Sample 208 further differing from prior art Sample 210 in the amount of the thiosulfonate employed. Appellants also compare claimed Samples 208, 209, 211 (emulsion "J5" with silver bromide core and 4.4 mg/Ag mol of thiosulfonate "2-3") and 212 (emulsion "J6" with silver bromide core and 4.4 mg/Ag mol of thiosulfonate "3-5") with prior art Sample 213 (emulsion "J7" with silver bromide core and 4.4 mg/Ag mol of sodium thiosulfate pentahydrate), as well as compare prior art Sample 207 (emulsion "J1" with silver bromoiodide core and 4.4 mg/Ag mol of sodium thiosulfate pentahydrate) with prior art Sample 213 (reply brief, page 5).

It is apparent that the issue addressed by appellants' comparison of claimed Samples 208 and 209 with prior art Sample 210 is whether one of ordinary skill in this art would have employed a silver bromide core rather than a silver bromoiodide core in view of their argument that Evans teaches the latter core for core/shell tabular grains. As we pointed out above, Evans does teach that either of these cores may be used and that the silver bromide core should be prepared in a manner to exclude iodide, while Tanemura and Shuto both teach that the presence of silver iodide should be avoided in preparing the core. We further pointed out above that Evans uses silver iodide in the preparation of the silver bromoiodide for the core in Emulsion A thereof which is the same manner in which "Seed Crystal No. I1" is prepared in the declaration (page 1).

We find from declaration Tables 3, as summarized in the table in the reply brief, that there is a difference in  $D_{max}$ ,  $D_{min}$  and negative sensitivity between Samples 209 (claimed) and

210 (prior art), which comparison constitute the closest comparison since the difference in the silver halide of the core is the sole difference between these emulsions. While there is also a difference in these properties between Samples 208 (claimed) and Sample 210, we note that almost fifteen times more thiosulfonate compound was present when the core of Sample 208 was sensitized. *See In re Dunn*, 349 F.2d 433, 439, 146 USPQ 479, 483 (CCPA 1965) ("[W]e do not feel it an unreasonable burden on appellants to require comparative examples relied on for non-obviousness to be truly comparative. The cause and effect sought to be proven is lost here in the welter of unfixed variables.").

It would reasonably appear from the record before us that between claimed Sample 209 and prior art Sample 210, the differences in  $D_{max}$  and  $D_{min}$  may be explained by the presence of silver iodide in the core of Sample 210 because Tanemura and Shuto teach that silver iodide should be avoided in obtaining a high contrast direct positive image having a low  $D_{min}$  and a high  $D_{max}$  as we have discussed above. This explanation would reasonably appear to also apply to the difference between claimed Sample 208 and Sample 210, although the matter of the significant difference in the amount of thiosulfonate compound would also appear to reasonably explain the differences in properties. While these references are silent with respect to the property of negative sensitivity, it reasonably appears from this record that the caution with respect to the presence of silver iodide in the core when using thiosulfonates taught by Tanemura and Shuto would extend to other properties of the emulsion, including that of obtaining a high contrast direct positive image. Indeed, appellants have not submitted a scientific explanation or other objective evidence which establishes the practical significance of the  $D_{max}$ ,  $D_{min}$  and negative sensitivity data in light of the teachings of Tanemura and Shuto and the difference in the amount of the thiosulfonate compound. All that is present in the record is declarant Matsunaga's statement that as between Samples 209 and 210, "Sample 209 gave remarkable results" (declaration, page 6), and appellants' statement in the reply brief that "Sample 210 . . . undesirably exhibited significantly greater negative sensitivity[footnote omitted] than Sample 209" and that Sample 208 "resulted in an even further reduction" (pages 4-5), which does not constitute such an explanation or evidence. *See In re Lindner*, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972) ("This court has said . . . that mere lawyers' arguments unsupported by

factual evidence are insufficient to establish unexpected results. [Citations omitted.] Likewise, mere conclusory statements in the specification and affidavits are entitled to little weight when the Patent Office questions the efficacy of those statements. [Citations omitted]”).

Appellants further compare claimed Samples 208, 209, 211 and 212 with prior art Sample 213, wherein the difference is several different thiosulfonate compounds in the former and the thiosulfate sensitizer compound in the latter as all have the silver bromide core, with the  $D_{max}$ ,  $D_{min}$  and negative sensitivity results shown in declaration Table 3 (reply brief, page 5). In this comparison, the core of each sample is silver bromide and the difference is the presence of a thiosulfonate or a thiosulfate when sensitizing the core with a gold sensitizer, although Sample 208 employs almost fifteen times as much of the sulfur compound as the other compared samples. In view of the same silver bromide core, the same gold sensitizer, the presence and absence of the thiosulfate compound, and the presence and absence of the thiosulfonate compound, this comparison would provide a closer comparison vis-à-vis the applied prior art than that involving Samples 208, 209 and 210. However, in the absence of an explanation of the practical significance of the difference in results with respect to the teachings of Tanemura and Shuto, we must agree with the examiner that the difference in  $D_{max}$  and  $D_{min}$  and negative sensitivity would appear to reflect the teachings of the references that the properties of high contrast direct positive image having a low  $D_{min}$  and a high  $D_{max}$  would be improved with the addition of the thiosulfonate compounds, and thus would appear to be the expected result (answer, pages 6-7). We do not find that appellants' statement in the reply brief that the claimed Samples "exhibited significantly reduced negative image formation as compared with" Sample 13 (page 5) or the unconnected statements with respect to these Samples by declarant Matsunaga (declaration, pages 6-7) constitute such an explanation or evidence. *See Lindner, supra.*

We further determine that appellants' statement that there was no difference in result between prior art Sample 207, which contains a silver bromoiodide core, and prior art Sample 213, which contains a silver bromide core, when sensitized with sodium thiosulfate pentahydrate (reply brief, page 5; see also declaration, page 6) does no more than demonstrate the teachings in Evans that both of these cores may be used in preparing the core/shell tabular grains thereof (reply brief, page 5).

Even if one or more of the comparisons advanced by appellants is/are found to establish unexpected results, the same is not commensurate in scope with the innumerable internal latent image direct positive photographic silver halide emulsions encompassed by appealed claim 1 and the extensive number of internal latent image direct positive photographic silver halide emulsions within the teachings of the applied references. Indeed, in view of the extensive number of combinations of different sensitizers which can be used in combination with a gold sensitizer as shown by each of the applied references discussed above, we find that the comparisons involving one gold sensitizer as the sole sensitizer for the core does not provide a reasonable basis on which to reliably predict the behavior of claimed emulsions that would routinely be prepared by one of ordinary skill in this art following the teachings of the references vis-à-vis other gold sensitizers alone or in combination with other sensitizers encompassed by claim 1. *See, e.g., In re Clemens*, 622 F.2d 1029, 1035-36, 206 USPQ 289, 295-96 (CCPA 1980); *In re Greenfield*, 571 F.2d 1185, 1189, 197 USPQ 227, 230 (CCPA 1978); *Lindner, supra*.

Accordingly, based on our consideration of the totality of the record before us, we have weighed the evidence of obviousness found in the combined teachings of Evans, Tanemura and Shuto with appellants' countervailing evidence of and argument for nonobviousness and conclude that the claimed invention encompassed by appealed claims 1 and 5 through 9 would have been obvious as a matter of law under 35 U.S.C. § 103(a).

The examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

*AFFIRMED*



CHARLES F. WARREN )  
Administrative Patent Judge )  
 )  
 )



TERRY J. OWENS )  
Administrative Patent Judge )  
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BOARD OF PATENT  
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Appeal No. 1999-2529

Application 08/915,683

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